

WHAT IS CLAIMED IS:

1. An air-intake system of an engine, comprising:
  - an air-intake port provided in a cylinder head;
  - an air-intake box provided in an air-intake flow passage of the engine;
  - an air-intake pipe forming part of the air-intake flow passage connecting the air-intake box to the air-intake port; and
  - a connecting pipe provided between the air-intake box and the air-intake pipe to allow the air-intake box and the air-intake pipe to communicate with each other, wherein
    - the connecting pipe is configured such that one opening end portion thereof is connected to a bottom portion of the air-intake box to open inside the air-intake box and the other end portion thereof is connected to the air-intake pipe to open inside of the air-intake pipe.
2. The air-intake system of an engine according to Claim 1, wherein the air-intake box is configured to have an inner bottom face thereof inclined such that a portion of the inner bottom face which is close to a position where the air-intake box is connected to the one opening end portion of the connecting pipe is lower.

3. The air-intake system of an engine according to Claim 1, further comprising:

a one-way valve provided in the connecting pipe, wherein

the one-way valve is configured to permit flow of a fluid from the one opening end portion toward the other opening end portion inside the connecting pipe and not to permit flow of the fluid from the other opening end portion toward the one opening end portion inside the connecting pipe.

4. The air-intake system of an engine according to Claim 1, wherein a direction in which the other opening end portion of the connecting pipe opens substantially corresponds with an air flow direction in which taken-in air flows inside the air-intake pipe.

5. The air-intake system of an engine according to Claim 4, wherein

the air-intake pipe includes a curved portion for allowing the air flow direction inside the air-intake pipe to be curved, and wherein

the other opening end portion of the connecting pipe is connected to an outer side of the curved portion of the air-intake pipe.

6. The air-intake system of an engine according to Claim 4, wherein the other opening end portion of the connecting pipe is connected to the air-intake pipe in the vicinity of the air-intake port.

7. The air-intake system of an engine according to Claim 1, wherein the engine has multiple cylinders, and a plurality of air-intake ports and air-intake pipes, the air-intake pipes are configured to connect the plurality of air-intake ports to the air-intake box, respectively, and

at least two of the air-intake pipes are connected to the air-intake box through the connecting pipe to allow an inside of the air-intake pipes and an inside of the air-intake box to communicate with each other.

8. The air-intake system of an engine according to Claim 7, wherein the connecting pipe includes a base portion having the one end portion to be connected to the air-intake box, and branch portions having the other opening end portions to be connected to the air-intake pipes, respectively.

9. The air-intake system of an engine according to Claim 8, further comprising:

one-way valves respectively provided in the branch portions of the connecting pipe, wherein

the one-way valves are each configured to permit flow of a fluid from the one opening end portion toward the other opening end portion inside the connecting pipe and not to permit flow of the fluid from the other opening end portion toward the one opening end portion inside the connecting pipe.

10. The air-intake system of an engine according to Claim 1, further comprising:

a breather pipe communicating with a crankcase of the engine; and

an air cleaner located upstream of the air-intake box in the air flow passage, wherein

the breather pipe communicates with the air cleaner.